

108	110	102 Item A			104 Item B			106 Item C		
		Units To Buy	Cost Of Units	Profit From Units	Units To Buy	Cost Of Units	Profit From Units	Units To Buy	Cost Of Units	Profit From Units
		0	0	0	0	0	0	0	0	0
		1	2	3	1	1	1	1	3	2
		2	4	6	2	2	2	2	6	4
		3	6	9	3	3	3	3	9	6
		4	8	12	4	4	3	4	12	8
		5	10	10	5	5	3	5	15	10
116 Constraint = Budget Limit = 17										

114

FIG. 1

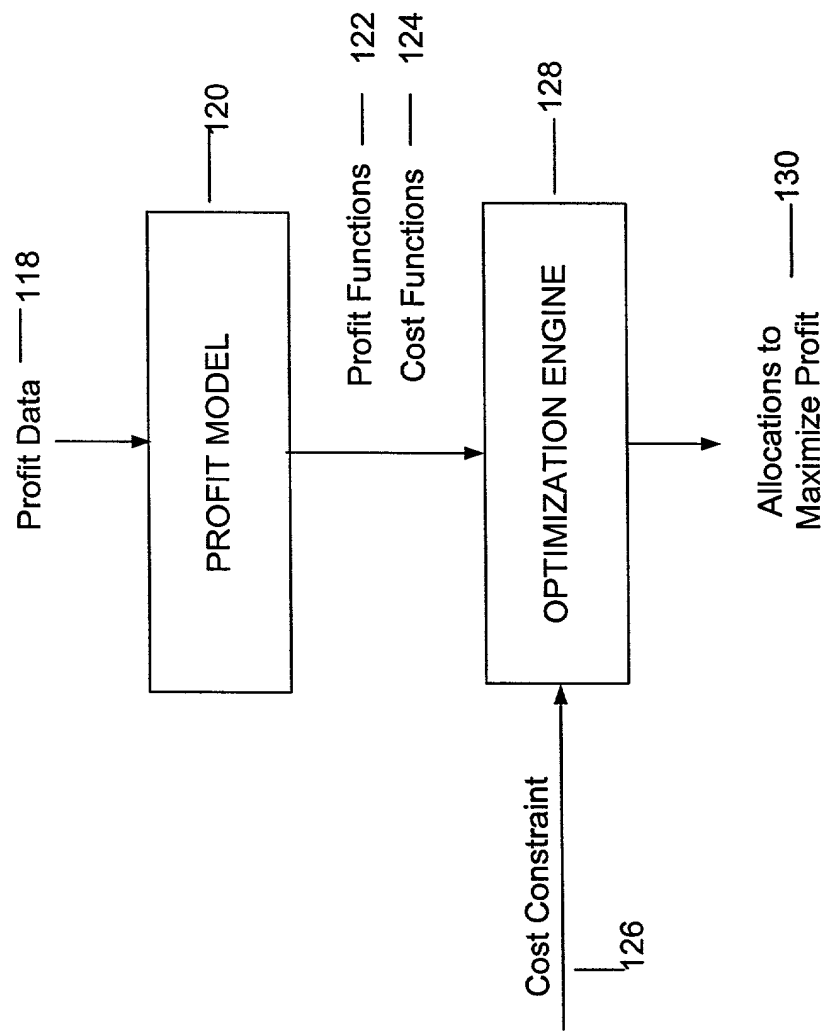
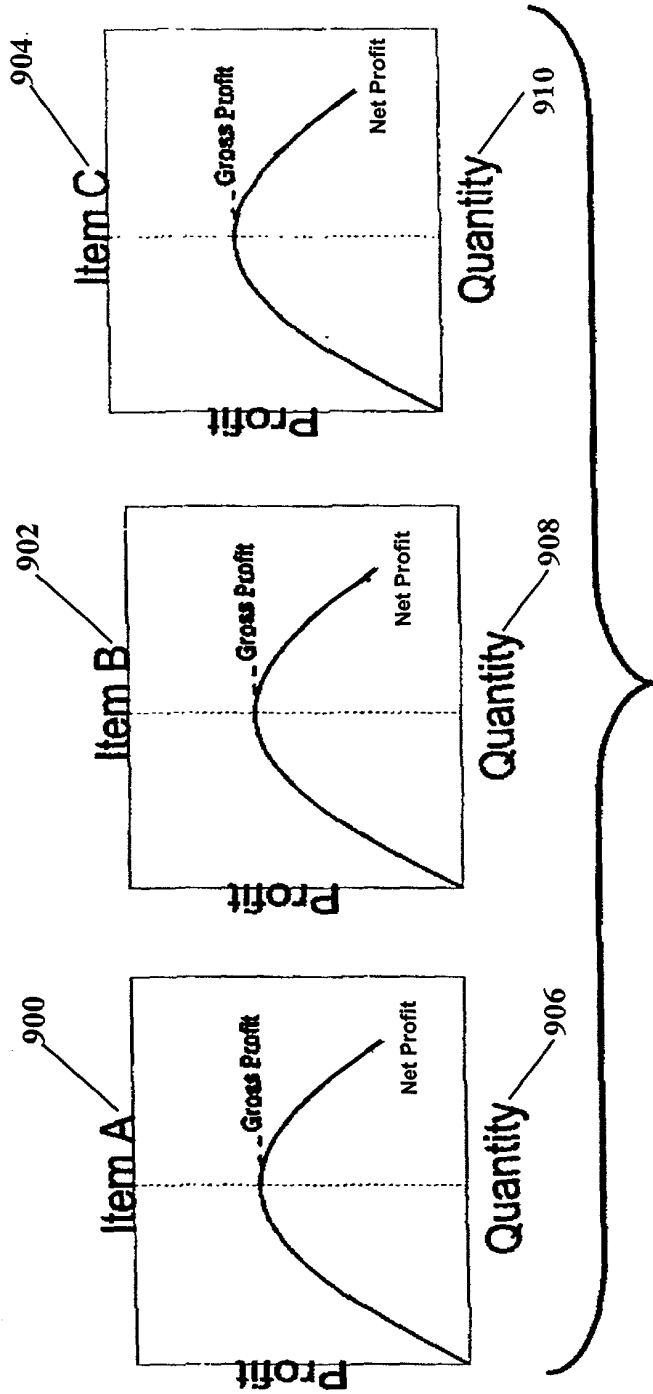


FIG. 2



Assortment Recommendation with Optimal Profit

FIG. 3

Class 1		Class 2		Class 3		... Class N	
Attribute 1	Attribute 2	Attribute 1	Attribute 2	Attribute 1	Attribute 2	Attribute 1	Attribute 2
0	0	1000	2000	0	0		
1500	3500	1500	3000	3500	6000		
2500	5400	2000	4000	99999	-10000		
3500	7100	2500	4750	99999	-10000		
4500	9000	3000	5500	99999	-10000		
5500	1000	3500	6000	99999	-10000		
6500	10500	4000	6000	99999	-10000		
..		
Objective: Maximize Attribute 2 Sum							
Constraint: Attribute 1 Sum (\leq , $>$, $=$) Limit							

FIG. 4

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Problem Description	Class	Attribute 1	Attribute 2	Constraint
Assortment Optimization, Dimensionally Constrained	Item	Width	Profit	Total Width Of Item Holding Fixture
Assortment Optimization, Budget Constrained	Item	cost	Profit	Total Budget Available For Items
Start Of Season Budget Allocation	Department	cost	Profit	Total Budget Available For Merchandise
Retail Floor Space Optimization	Department	Width or Area	Profit	Total Floor Space (Width or Area) Of Store
Advertising Space Allocation	Item	Ad Area	Profit	Total Area Of Advertisement Brochure
Catalog Space Allocation	Item	Ad Area	Profit	Total Area Of Catalog Pages
Portfolio Of Loans Extended By A Bank	Applicant	Loan	Profit	Total Loan Budget
Merchandise Allocation To Stores From Warehouse	Store	Units Shipped	Profit	Total Units In The Warehouse

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FIG. 5

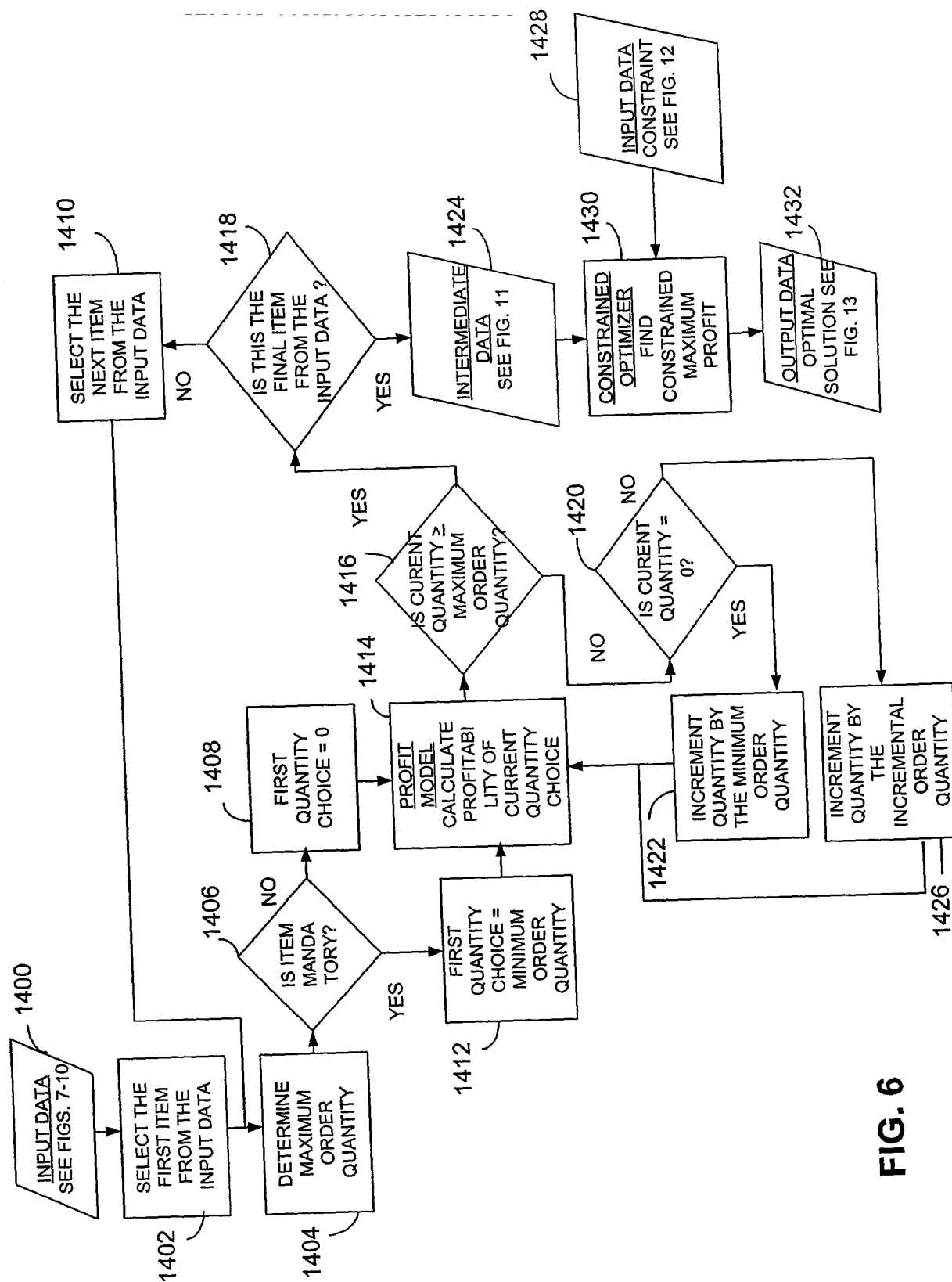


FIG. 6

1502	1504	1506	1508	1510	1512	1514	1516	1518	1520	1522	1524	1526	1528	1530	1532	1534	1536	1538	1540
Include	Item ID	Item Description	Item Type	Total Lifecycle	Cost	Width	Height	Capacity	Mandatory	Estimate Type	Resupply Factor	MOQ	Incr Order Qty	Min Shelf Presence	Holding Cost	Vendor Lead Time	Start Sell Date	Nbr Of Stores	Pack Size
1	411	FlatClassicFitChinoA	F	26	14.12	1	1	1	T	S	1	1200	48	1	0	4	02012001	90	6
1	412	FlatRelaxedFitChinoA	R	26	14.03	1	1	1	F	S	1	400	48	1	0	4	02012001	90	6
1	414	PleatedClassicFitChinoA	R	26	14.05	1	1	1	F	S	1	400	48	1	0	4	02012001	120	6
1	415	PleatedRelaxedFitChinoA	R	26	13.44	1	1	1	T	S	1	400	48	1	0	4	02012001	120	6
1	421	FlatClassicFitChinoB	F	26	13.78	1	1	1	F	S	1	400	48	1	0	4	02012001	90	6
1	422	FlatRelaxedFitChinoB	F	26	14.16	1	1	1	T	S	1	400	48	1	0	4	02012001	90	6
1	423	FlatTailoredFitChinoB	F	26	16.64	1	1	1	F	S	1	400	48	1	0	4	02012001	60	6
1	424	PleatedClassicFitChinoB	R	26	13.52	1	1	1	F	S	1	400	48	1	0	4	02012001	90	6
1	425	PleatedRelaxedFitChinoB	R	26	14.79	1	1	1	T	S	1	400	48	1	0	4	02012001	90	6
1	426	PleatedTailoredFitChinoB	F	26	15.5	1	1	1	T	S	1	400	48	1	0	4	02012001	60	6
1	431	ClassicFitJean	R	26	11.34	1	1	1	T	S	1	400	48	1	0	4	02012001	120	6
1	432	RelaxedFitJean	R	26	13.75	1	1	1	F	S	1	400	48	1	0	4	02012001	120	6
1	433	BootLegJean	F	26	12.96	1	1	1	F	S	1	400	48	1	0	4	02012001	60	6
1	434	BaggyFitJean	F	26	13.5	1	1	1	F	S	1	400	48	1	0	4	02012001	90	6
1	471	PleatherPant	F	13	11.66	1	1	1	T	S	1	400	48	1	0	4	02012001	60	6

FIG. 7

Item ID	Entry Type	Nbr of Entries	Week 1	Week 2	Week 3	Week 26
411	DEMAND	1	2390			
411	PROMO	1	0			
411	PRICE	1	24			
412	DEMAND	26	1210	0	1210	1210
412	PROMO	26	0	1625	0	0
412	PRICE	26	45	30	45	45
:	:	:	:	:		
432	DEMAND	1	1420			
432	PROMO	1	0			
432	PRICE	1	27			
433	DEMAND	26	125	500	400	25
433	PROMO	26	0	0	0	0
433	PRICE	26	39	39	39	39
434	DEMAND	26	500	1000	950	75
434	PROMO	26	0	0	0	0
434	PRICE	26	22	22	22	15
471	DEMAND	1	1430			
471	PROMO	1	0			
471	PRICE	1	27			

1600

FIG. 8

1702	Periods of Supply:	2.5
1704	Periods per Window:	3
1706	Number of Simulation Trials:	10
1708	Interest Rate:	0.1
1710	Date the Buys Will be Placed:	01012001
1712	Operating Hours per Period:	84
1714	Stock Clerk Success Rate:	0.8
1716	Stock Clerk Cycle Time:	4
1718	Stock Clerk Trigger Value:	0

1700

FIG. 9

FIG. 10

1802	Season Start Date:	2012001
1804	Season End Date:	7312001

1800

FIG. 10

Item ID	Item Description	Choice	Index	Profit	Cost	Units
411	FlatClassicFitChinoA	0	0	11856	16944	1200
411	FlatClassicFitChinoA	1	0	12330.24	17621.76	1248
411	FlatClassicFitChinoA	2	0	12804.48	18299.52	1296
411	FlatClassicFitChinoA	3	0	13278.72	18977.28	1344
:	:	:	:	:	:	:
411	FlatClassicFitChinoA	22	0	22226.88	31854.72	2256
411	FlatClassicFitChinoA	23	0	22432.32	32532.48	2304
411	FlatClassicFitChinoA	24	0	22464.96	33210.24	2352
411	FlatClassicFitChinoA	25	0	22250.4	33888	2400
:	:	:	:	:	:	:
411	FlatClassicFitChinoA	48	0	7545.12	49476.48	3504
411	FlatClassicFitChinoA	49	0	6867.36	50154.24	3552
412	FlatRelaxedFitChinoA	0	1	0	0	0
412	FlatRelaxedFitChinoA	1	1	14484.18	16976.3	1210
412	FlatRelaxedFitChinoA	2	1	-1000000	1000000	-999999
412	FlatRelaxedFitChinoA	3	1	-1000000	1000000	-999999
:	:	:	:	:	:	:
412	FlatRelaxedFitChinoA	48	1	-1000000	1000000	-999999
412	FlatRelaxedFitChinoA	49	1	-1000000	1000000	-999999
414	PleatedClassicFitChinoA	0	2	0	0	0
414	PleatedClassicFitChinoA	1	2	9452.9	13347.5	950
:	:	:	:	:	:	:
434	BaggyFitJean	48	13	-1000000	1000000	-999999
434	BaggyFitJean	49	13	-1000000	1000000	-999999
471	PleatherPant	0	14	4136	4664	400
471	PleatherPant	1	14	4632.32	5223.68	448
:	:	:	:	:	:	:
471	PleatherPant	49	14	-1000000	1000000	-999999

FIG. 11

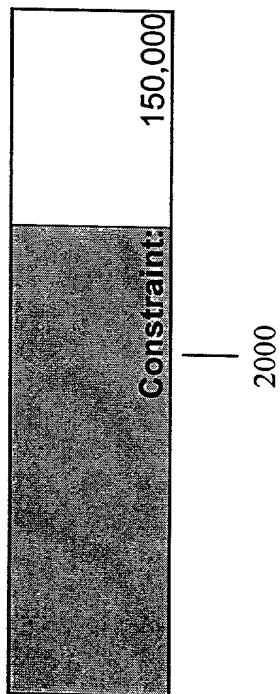


FIG. 12

Item ID	Item Description	Choice	Index	Profit	Cost	Units
411	FlatClassicFitChinoA	1	0	12330	17620	1248
412	FlatRelaxedFitChinoA	1	1	14484	16980	1210
414	PleatedClassicFitChinoA	0	2	0	0	0
415	PleatedRelaxedFitChinoA	0	3	1210	16260	1210
421	FlatClassicFitChinoB	14	4	11449	14110	1024
422	FlatRelaxedFitChinoB	9	5	9019	11780	832
423	FlatTailoredFitChinoB	8	6	11241	12250	736
424	PleatedClassicFitChinoB	1	7	12859	15140	1120
425	PleatedRelaxedFitChinoB	0	8	860	12720	860
426	PleatedTailoredFitChinoB	7	9	12144	11410	736
431	ClassicFitJean	0	10	960	10890	960
432	RelaxedFitJean	1	11	18817	19520	1420
433	BootLegJean	6	12	8762	8290	640
434	BaggyFitJean	20	13	17701	17710	1312
471	PleatherPant	19	14	13245	15300	1312

2100

FIG. 13